

SEQUENCE LISTING

<110> Hu, Jing-Shan
Rosen, Craig
Liang, Cao

<120> Vascular Endothelial Growth Factor 2

<130> PF112P1

<140> 08/465,968

<141> 1995-06-06

<150> 08/207,550

<151> 1994-03-08

<160> 10

<170> PatentIn Ver. 2.0

<210> 1

<211> 1674

<212> DNA

<213> Homo sapiens

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ctc	gcc	gct	gcg	ctg	ctc	ccg	ggg	cct	cgc	gag	gcg	ccc	gcc	gcc	gcc	98
Leu	Ala	Ala	Ala	Leu	Leu	Pro	Gly	Pro	Arg	Glu	Ala	Pro	Ala	Ala	Ala	
			-30				-25					-20				

gcc	gcc	ttc	gag	tcc	gga	ctc	gac	ctc	tgc	gac	gcg	gag	ccc	gac	gcg	146
Ala	Ala	Phe	Glu	Ser	Gly	Leu	Asp	Leu	Ser	Asp	Ala	Glu	Pro	Asp	Ala	
		-15				-10					-5					

ggc	gag	gcc	acg	gct	tat	gca	agc	aaa	gat	ctg	gag	gag	cag	tta	cgg	194
Gly	Glu	Ala	Thr	Ala	Tyr	Ala	Ser	Lys	Asp	Leu	Glu	Glu	Gln	Leu	Arg	
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tct	gtg	tcc	agt	gta	gat	gaa	ctc	atg	act	gta	ctc	tac	cca	gaa	tat	242
Ser	Val	Ser	Ser	Val	Asp	Glu	Leu	Met	Thr	Val	Leu	Tyr	Pro	Glu	Tyr	
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tgg	aaa	atg	tac	aag	tgt	cag	cta	agg	aaa	gga	ggc	tgg	caa	cat	aac	290
Trp	Lys	Met	Tyr	Lys	Cys	Gln	Leu	Arg	Lys	Gly	Gly	Trp	Gln	His	Asn	
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aga gaa cag gcc aac ctc aac tca agg aca gaa gag act ata aaa ttt	338
Arg Glu Gln Ala Asn Leu Asn Ser Arg Thr Glu Glu Thr Ile Lys Phe	
50 55 60	
gct gca gca cat tat aat aca gag atc ttg aaa agt att gat aat gag	386
Ala Ala Ala His Tyr Asn Thr Glu Ile Leu Lys Ser Ile Asp Asn Glu	
65 70 75	
tgg aga aag act caa tgc atg cca cgg gag gtg tgt ata gat gtg ggg	434
Trp Arg Lys Thr Gln Cys Met Pro Arg Glu Val Cys Ile Asp Val Gly	
80 85 90 95	
aag gag ttt gga gtc gcg aca aac acc ttc ttt aaa cct cca tgt gtg	482
Lys Glu Phe Gly Val Ala Thr Asn Thr Phe Phe Lys Pro Pro Cys Val	
100 105 110	
tcc gtc tac aga tgt ggg ggt tgc tgc aat agt gag ggg ctg cag tgc	530
Ser Val Tyr Arg Cys Gly Gly Cys Cys Asn Ser Glu Gly Leu Gln Cys	
115 120 125	
atg aac acc agc acg agc tac ctc agc aag acg tta ttt gaa att aca	578
Met Asn Thr Ser Thr Ser Tyr Leu Ser Lys Thr Leu Phe Glu Ile Thr	
130 135 140	
gtg cct ctc tct caa ggc ccc aaa cca gta aca atc agt ttt gcc aat	626
Val Pro Leu Ser Gln Gly Pro Lys Pro Val Thr Ile Ser Phe Ala Asn	
145 150 155	
cac act tcc tgc cga tgc atg tct aaa ctg gat gtt tac aga caa gtt	674
His Thr Ser Cys Arg Cys Met Ser Lys Leu Asp Val Tyr Arg Gln Val	
160 165 170 175	
cat tcc att att aga cgt tcc ctg cca gca aca cta cca cag tgt cag	722
His Ser Ile Ile Arg Arg Ser Leu Pro Ala Thr Leu Pro Gln Cys Gln	
180 185 190	
gca gcg aac aag acc tgc ccc acc aat tac atg tgg aat aat cac atc	770
Ala Ala Asn Lys Thr Cys Pro Thr Asn Tyr Met Trp Asn Asn His Ile	
195 200 205	
tgc aga tgc ctg gct cag gaa gat ttt atg ttt tcc tcg gat gct gga	818
Cys Arg Cys Leu Ala Gln Glu Asp Phe Met Phe Ser Ser Asp Ala Gly	
210 215 220	
gat gac tca aca gat gga ttc cat gac atc tgt gga cca aac aag gag	866
Asp Asp Ser Thr Asp Gly Phe His Asp Ile Cys Gly Pro Asn Lys Glu	
225 230 235	
ctg gat gaa gag acc tgt cag tgt gtc tgc aga gcg ggg ctt cgg cct	914
Leu Asp Glu Glu Thr Cys Gln Cys Val Cys Arg Ala Gly Leu Arg Pro	
240 245 250 255	
gcc agc tgt gga ccc cac aaa gaa cta gac aga aac tca tgc cag tgt	962
Ala Ser Cys Gly Pro His Lys Glu Leu Asp Arg Asn Ser Cys Gln Cys	
260 265 270	
gtc tgt aaa aac aaa ctc ttc ccc agc caa tgt ggg gcc aac cga gaa	1010
Val Cys Lys Asn Lys Leu Phe Pro Ser Gln Cys Gly Ala Asn Arg Glu	
275 280 285	

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His	Tyr	Asn	Thr 70	Glu	Ile	Leu	Lys	Ser 75	Ile	Asp	Asn	Glu	Trp 80	Arg	Lys
Thr	Gln	Cys 85	Met	Pro	Arg	Glu	Val 90	Cys	Ile	Asp	Val	Gly 95	Lys	Glu	Phe
Gly	Val 100	Ala	Thr	Asn	Thr	Phe 105	Phe	Lys	Pro	Pro	Cys 110	Val	Ser	Val	Tyr
Arg 115	Cys	Gly	Gly	Cys	Cys 120	Asn	Ser	Glu	Gly	Leu 125	Gln	Cys	Met	Asn	Thr 130
Ser	Thr	Ser	Tyr	Leu 135	Ser	Lys	Thr	Leu	Phe 140	Glu	Ile	Thr	Val	Pro 145	Leu
Ser	Gln	Gly	Pro 150	Lys	Pro	Val	Thr	Ile 155	Ser	Phe	Ala	Asn	His 160	Thr	Ser
Cys	Arg	Cys 165	Met	Ser	Lys	Leu	Asp 170	Val	Tyr	Arg	Gln	Val 175	His	Ser	Ile
Ile	Arg 180	Arg	Ser	Leu	Pro	Ala 185	Thr	Leu	Pro	Gln	Cys 190	Gln	Ala	Ala	Asn
Lys 195	Thr	Cys	Pro	Thr 200	Asn	Tyr	Met	Trp	Asn	Asn 205	His	Ile	Cys	Arg	Cys 210
Leu	Ala	Gln	Glu	Asp 215	Phe	Met	Phe	Ser	Ser 220	Asp	Ala	Gly	Asp	Asp 225	Ser
Thr	Asp	Gly	Phe 230	His	Asp	Ile	Cys	Gly 235	Pro	Asn	Lys	Glu	Leu 240	Asp	Glu
Glu	Thr	Cys 245	Gln	Cys	Val	Cys	Arg 250	Ala	Gly	Leu	Arg	Pro 255	Ala	Ser	Cys
Gly	Pro 260	His	Lys	Glu	Leu	Asp 265	Arg	Asn	Ser	Cys	Gln 270	Cys	Val	Cys	Lys
Asn 275	Lys	Leu	Phe	Pro 280	Ser	Gln	Cys	Gly	Ala	Asn 285	Arg	Glu	Phe	Asp	Glu 290
Asn	Thr	Cys	Gln	Cys 295	Val	Cys	Lys	Arg	Thr 300	Cys	Pro	Arg	Asn	Gln 305	Pro
Leu	Asn	Pro	Gly 310	Lys	Cys	Ala	Cys	Glu 315	Cys	Thr	Glu	Ser	Pro 320	Gln	Lys
Cys	Leu	Leu 325	Lys	Gly	Lys	Lys	Phe 330	His	His	Gln	Thr	Cys 335	Ser	Cys	Tyr
Arg	Arg 340	Pro	Cys	Thr	Asn	Arg 345	Gln	Lys	Ala	Cys	Glu 350	Pro	Gly	Phe	Ser
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<213> Homo sapiens

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35 40 45
Glu Ile Asp Ser Val Gly Ser Glu Asp Ser Leu Asp Thr Ser Leu Arg
50 55 60
Ala His Gly Val His Ala Thr Lys His Val Pro Glu Lys Arg Pro Leu
65 70 75 80
Pro Ile Arg Arg Lys Arg Ser Ile Glu Glu Ala Val Pro Ala Val Cys
85 90 95
Lys Thr Arg Thr Val Ile Tyr Glu Ile Pro Arg Ser Gln Val Asp Pro
100 105 110
Thr Ser Ala Asn Phe Leu Ile Trp Pro Pro Cys Val Glu Val Lys Arg
115 120 125
Cys Thr Gly Cys Cys Asn Thr Ser Ser Val Lys Cys Gln Pro Ser Arg
130 135 140
Val His His Arg Ser Val Lys Val Ala Lys Val Glu Tyr Val Arg Lys
145 150 155 160
Lys Pro Lys Leu Lys Glu Val Gln Val Arg Leu Glu Glu His Leu Glu
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Thr Asp Val Arg
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His Gly Asp Pro Gly Glu Glu Asp Gly Ala Glu Leu Asp Leu Asn Met		
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Thr Arg Ser His Ser Gly Gly Glu Leu Glu Ser Leu Ala Arg Gly Arg		
65	70	75
Arg Ser Leu Gly Ser Leu Thr Ile Ala Glu Pro Ala Met Ile Ala Glu		
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Cys Lys Thr Arg Thr Glu Val Phe Glu Ile Ser Arg Arg Leu Ile Asp		
100	105	110
Arg Thr Asn Ala Asn Phe Leu Val Trp Pro Pro Cys Val Glu Val Gln		
115	120	125
Arg Cys Ser Gly Cys Cys Asn Asn Arg Asn Val Gln Cys Arg Pro Thr		
130	135	140
Gln Val Gln Leu Arg Pro Val Gln Val Arg Lys Ile Glu Ile Val Arg		
145	150	155
Lys Lys Pro Ile Phe Lys Lys Ala Thr Val Thr Leu Glu Asp His Leu		
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Ala Cys Lys Cys Glu Thr Val Ala Ala Ala Arg Pro Val Thr Arg Ser		
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Pro Gly Gly Ser Gln Glu Gln Arg Ala Lys Thr Pro Gln Thr Arg Val		
195	200	205
Thr Ile Arg Thr Val Arg Val Arg Arg Pro Pro Lys Gly Lys His Arg		
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240		
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 Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
 35 40 45
 Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu

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Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu 65 70 75 80		
Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Gly Leu Glu Cys Val Pro 85 90 95		
Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His 100 105 110		
Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys 115 120 125		
Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Lys Lys Ser Val 130 135 140		
Arg Gly Lys Gly Lys Gly Gln Lys Arg Lys Arg Lys Lys Ser Arg Tyr 145 150 155 160		
Lys Ser Trp Ser Val Tyr Val Gly Ala Arg Cys Cys Leu Met Pro Trp 165 170 175		
Ser Leu Pro Gly Pro His Pro Cys Gly Pro Cys Ser Glu Arg Arg Lys 180 185 190		
His Leu Phe Val Gln Asp Pro Gln Thr Cys Lys Cys Ser Cys Lys Asn 195 200 205		
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<400> 8
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<210> 9
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<400> 9
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<210> 10
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